



PPE Testing Standards & COVID-19 (State of Delaware Approved)

A note from Delaware Public Health:

The Medical Director has approved the ASTM International standards with the following caveats:

- Standard Specification for Performance of Materials Used in Medical Face Masks (Designation F2100-19): these are specifically for general use.
- Standard Practice for Respiratory Protection (Designation F3387-19): pay special attention to section 4.2 Exceptions.

Note for the Reader: More detailed information is available with a no-cost public access account at <https://www.astm.org/COVID-19/>.

Masks

- ASTM F2299/F2299M-03(2017) Standard Test Method for Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres
- ASTM F2101-19 Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of *Staphylococcus aureus*
- ASTM F2100-19 Standard Specification for Performance of Materials Used in Medical Face Masks



- ASTM F1862/F1862M-17 Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood (Horizontal Projection of Fixed Volume at a Known Velocity)
- ASTM F1494-14 Standard Terminology Relating to Protective Clothing

Medical Gowns

- ASTM F2407 - 06(2013)e1 Standard Specification for Surgical Gowns Intended for Use in Healthcare Facilities
- ASTM F1671 / F1671M - 13 Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Blood-Borne Pathogens Using Phi-X174 Bacteriophage Penetration as a Test System
- ASTM F1868 - 17 Standard Test Method for Thermal and Evaporative Resistance of Clothing Materials Using a Sweating Hot Plate
- ASTM D751 - 19 Standard Test Methods for Coated Fabrics
- ASTM D1683/D1683M-17(2018) Standard Test Method for Failure in Sewn Seams of Woven Fabrics
- ASTM D1776/D1776M-20 Standard Practice for Conditioning and Testing Textiles
- ASTM D5034-09(2017) Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- ASTM D5587-15(2019) Standard Test Method for Tearing Strength of Fabrics by Trapezoid Procedure
- ASTM D5733 - 99 Standard Test Method for Tearing Strength of Nonwoven Fabrics by the Trapezoid Procedure (Withdrawn 2008)
- ASTM D6701-16 Standard Test Method for Determining Water Vapor Transmission Rates Through Nonwoven and Plastic Barriers
- ASTM F1494-14 Standard Terminology Relating to Protective Clothing



Gloves

- ASTM D6319-19 Standard Specification for Nitrile Examination Gloves for Medical Application
- ASTM D3578-19 Standard Specification for Rubber Examination Gloves
- ASTM D5250-19 Standard Specification for Poly(vinyl chloride) Gloves for Medical Application
- ASTM D6977-19 Standard Specification for Polychloroprene Examination Gloves for Medical Application

Hand Sanitizers

- ASTM E2755-15 Standard Test Method for Determining the Bacteria-Eliminating Effectiveness of Healthcare Personnel Hand Rub Formulations Using Hands of Adults
- ASTM E1174-13 Standard Test Method for Evaluation of the Effectiveness of Health Care Personnel Handwash Formulations
- ASTM E3058-16 Standard Test Method for Determining the Residual Kill Activity of Hand Antiseptic Formulations

Respirators

- ASTM F3387-19 Standard Practice for Respiratory Protection